

STRM 5123D1US – SN 10/743,532

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (canceled).
2. (currently amended) ~~The method of claim 1~~ device of claim 26 including catheters connecting the device to a fluid source in a mammal.
3. (currently amended) ~~The method~~ device of claim 1 26 wherein the binding device includes a semipermeable membrane for confining the binding compound.
4. (canceled).
5. (currently amended) ~~The method of claim 4~~ device of claim 13 wherein the carrier is selected from the group consisting of a wall of the device, a fixed matrix in the device, and a fill of beads or other granules.
6. (currently amended) ~~The method of claim 1~~ device of claim 13 wherein the second portion of the affinity binder is adapted to bind selectively with a pathogenic species.
7. (currently amended) ~~The method of claim 1~~ device of claim 13 wherein the affinity binders ~~comprise antibodies~~ binder comprises an antibody.
8. (currently amended) ~~The method~~ device of claim 7 wherein the first portions portion of the affinity binders ~~comprise~~ binder comprises an Fc portions portion of the antibodies antibody.
9. (currently amended) ~~The method of claim 1~~ device of claim 13 wherein the device is an extracorporeal treatment device, the device including

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means a first catheter adapted for removing blood from a mammal, a passage in the device adapted for passing at least a part of the blood through the device, and a second catheter adapted for returning at least a part of the blood to the mammal.

10. (currently amended) ~~The method of claim 1~~ device of claim 13 wherein the binding compound comprises Protein A or Protein G.

11. (canceled).

12. (canceled).

13. (currently amended) A device having contained therein a binding compound bound to a carrier, the binding compound having affinity for a binding partner, and at least one affinity binder comprising a first portion comprising the binding partner ~~bound to the binding compound~~ and a second portion adapted to bind selectively with at least one species selected from a species comprising a targeting species bound to a targeted species and a pathogenic species, the binding partner being bound to the binding compound. [[.]]

14. (original) The device of claim 13 wherein the device is an extracorporeal device including means for connecting the device to a fluid source in a mammal.

15. (currently amended) The device of claim 13, wherein the device comprises regeneration means for regenerating the second portion of ~~at least one said~~ affinity binder.

16. (original) The device of claim 15, wherein the regeneration means comprise a solution.

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17. (original) The device of claim 16, wherein the solution is an acidic buffer.

18. (currently amended) The device of claim 13 wherein ~~at least one of the said~~ affinity binders binder comprises a second portion having affinity to a targeted species bound to a targeting species.

19. (original) The device of claim 18 wherein the targeted species comprises a radioactive molecule, a radioactive atom, or a radioactive ion.

20. (canceled).

21. (currently amended) ~~The method of claim 20~~ device of claim 26 wherein the ~~non-antibody~~ binding compound is selected from the group consisting of Protein A and Protein G.

22. (original) A species-removing device for removing an antigen or hapten from a mammal, the device having contained therein a binding compound attached to a matrix and an affinity binder bound by affinity binding to the binding compound, the affinity binder having affinity for said antigen or hapten.

23. (currently amended) ~~The method~~ device of claim 22 wherein the species antigen or hapten is selected from the group consisting of LDL, oxidized-LDL, and rheumatoid factor.

24. (currently amended) ~~A method of making a binding device comprising a first step of confining in the device a binding compound, the binding compound having affinity for a binding partner, a second step of preparing an affinity binder comprising a first portion comprising the binding partner and a second portion adapted to bind selectively with a species, thereafter a step of introducing said~~

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~~affinity binder into the device so as to cause the binding partner to bind to the binding compound, the device further comprising an~~ The device of claim 26 wherein the on-line regeneration system includes at least one automatically operated device.

25. (new) A device having contained therein a binding compound, the binding compound having affinity for a binding partner, and at least one affinity binder comprising a first portion comprising the binding partner and a second portion adapted to bind selectively with at least one species selected from a species comprising a targeting species bound to a targeted species and a pathogenic species, the binding partner being bound to the binding compound, and a semipermeable membrane for confining the binding compound.

26. (new) A species-removing device, the device having contained therein a binding compound and an affinity binder bound by affinity binding to the binding compound, the affinity binder having affinity for an antigen or hapten, the device further comprising an on-line regeneration system.